

REMARKS/ARGUMENTS

Claims 1, 3, 5, 6, 10-15 and 17 remain pending, and new claims 21-27 have been added to the present application. Dependent claim 2 was canceled in a previous amendment in view of the incorporation of its limitation into claim 1. Claim 4 has been canceled herein in view of the incorporation of their limitations into claim 1. Claims 7-9, 16 and 18-20, which were withdrawn from consideration as being non-elected in response to an earlier restriction requirement, have been canceled herein without prejudice to pursue those claims in further continuing application(s) filed during the pendency of the present application.

Claim 1 has been amended to incorporate three additional limitations:

- (A) to define the knife carrying unit as being *movable around the circumference of the knife roller*;
- (B) to define the shaped slot in the knife holder as having a component *that extends circumferentially such that the shaped slot traverses a non-linear path on the knife roller periphery*; and
- (C) to define the resilient elastomeric material of the knife holder as having sufficient resiliency to accommodate *circumferential force* imposed upon the knife blade.

Limitation (A) was recited in canceled claim 4. Support for limitation (B) above is present in applicant's specification at paragraph 0003:

“In the illustrated embodiment, the knife blades are generally straight along the longitudinal direction for a distance from their center, until they curve circumferentially away from the center axes at their ends.”

Support for limitation (B) is also present in applicant's Figures 3 and 4 and paragraph 0006, which states, “[T]hese shaped knives can be formed of a variety of angles, arcs, curves, and/or geometric shapes”. Support for limitation (C) is present in paragraph 0006 of applicant's specification, which states that “the setup of the knife roller and later during the cutting operation, the knife holder yields within its elastic limit to take up displacement of the shaped cutting knives caused by radial *and circumferential forces* imposed upon them by the anvil surface.”

Claim 17 has been amended to incorporate further limitations (A) and (B) set forth above with respect to claim 1.

New claim 21 defines the shaped cutting knife as being capable of making a *curved* cut on the web material. Support for this new claim is present in applicant's specification at paragraphs 0006 and 0007 (“These shaped knives can be formed of a variety of angles, arcs, curves, and/or geometric shapes”).

New claim 22 defines the shaped cutting knife as being capable of making an *arcuately shaped* cut on the web material. Support for this new claim is present in applicant's specification at paragraph 0007 (“[A] rotary knife system which accommodates shaped (including curved, angled, actuate, and/or geometric) knives within a resilient base”).

New claim 23 defines the shaped cutting knife as being capable of making a *geometrically shaped* cut on the web material. New claims 24-27 further define the geometric shapes as being *circular, oval, heart shaped and star shaped*, respectively. Support for these new claims is present in applicant's specification at paragraphs 0007, 0006, and 0014 (“Some examples of such geometric shapes can include, but are not limited to, hearts, stars, circles, or ovals.”).

Anticipation Rejection Based Upon McMahon

In the August 21, 2006 final Office Action, claims 1, 3-6, 10-11, 14-15 and 17 were rejected under 35 U.S.C. §102(b) as being anticipated by McMahon et al. U.S. Patent No. 4,640,165. Applicant submits that McMahon cannot anticipate either of independent claims 1 and 17, or claims 3, 5, 6, 10-11, 14-15 dependent from claim 1, because McMahon does not disclose or suggest each and every limitation recited in claims 1 and 17 as currently amended.

McMahon's knife holder does not include a "shaped" slot having a component that extends circumferentially such that the slot traverses a non-linear path on the knife roller periphery. The slot that carries McMahon's knife blade is necessarily straight because the entire length of the blade extends only in the longitudinal direction. In this regard, McMahon states:

"[t]he assemblies A, B, C and D are mounted lengthwise of the knife roller 18, as more particularly shown in FIG. 2, and *parallel to the longitudinal axis* 12 of the knife roller."

(McMahon at column 4, lines 25-28). As shown in McMahon's Figure 2, and as acknowledged in the Office Action, only the *width* of McMahon's slot extends circumferentially. Absent any disclosure or suggestion of a slot for carrying a knife blade that has a component extending circumferentially such that the slot traverses a *non-linear path* on the knife roller periphery, McMahon cannot anticipate claims 1 and 17, or claims 3, 5, 6, 10-16 dependent upon claim 1, or new claims 21-27, which are also dependent upon claim 1.

Anticipation Rejection Based Upon Gammeter

In the August 21, 2006 final Office Action, claims 1, 3, 11-15, and 17 were rejected under 35 U.S.C. §102(b) as being anticipated by Gammeter U.S. Patent No. 1,577,620. Applicant submits that, like McMahon, Gammeter cannot anticipate either of independent claims 1 and 17, or dependant claims 3, 11-15, because Gammeter does not disclose or suggest each and every limitation recited in claims 1 and 17, as presently amended.

In the August 21, 2006 Office Action, claim 4 of the present application was not rejected as being anticipated by Gammeter, since Gammeter does not disclose that the knife carrying unit is movable around the circumference of the knife roller. Claims 1 and 17 have been amended to include that limitation of canceled claim 4, and therefore overcome the anticipation rejection based upon Gammeter.

Gammeter, like McMahon, also fails to disclose or suggest that the slot for carrying a knife blade has a component extending circumferentially such that the slot traverses a *non-linear* path on the knife roller periphery. Gammeter's knife blades, although helically wound around the periphery of the knife roller, can only cut straight lines. Moreover, the forces imposed on Gammeter's knife blade are not accommodated in the radial *and* circumferential directions recited in each of the applicant's claims.

Gammeter further states that in order to avoid "buckling of the middle portion of the knife away from the drum" the anvil "*at no time bears upon more than one part of the same knife*" (Gammeter at page 2, lines 15-18). In the applicant's claimed structure, the knife holder is formed of an elastomeric material having sufficient resiliency to accommodate radial *and* circumferential forces, even when more than one part of the blade engages the anvil. Since Gammeter's

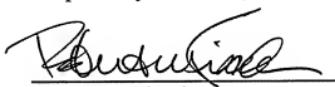
anvil cannot bear on more than one part of the same knife blade, Gammeter's structure cannot accommodate forces on the knife blade in the radial *and* circumferential directions. Gammeter cannot, therefore, anticipate any of claims 1 and 17, or claims 3, 5, 6, 10-16, 21-27 dependent upon claim 1, or new claims 21-27, which are also dependent upon claim 1.

* * * * *

In view of the foregoing amendments and remarks, applicant submits that claims 1, 3, 5, 6, 10-15 and 17, as well as new claims 21-27, are allowable. The Examiner is invited to telephone the applicant's undersigned attorney at 312-775-8123, if any unresolved matters remain.

Please charge any fees incurred in connection with this submission to Deposit Account No. 13-0017.

Respectfully submitted,



Robert W. Fieseler
Registration No. 31,826
Attorney for Applicant

Christina F. Szakaly
McANDREWS, HELD & MALLOY, LTD.
500 West Madison Street, 34th Floor
Chicago, Illinois 60661

Telephone (312) 775-8000
Facsimile (312) 775-8100

Dated: October 20, 2006